

A NEW PHALLOID GENUS

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Protophallus gen. nov.

Peridium epigeal, sessile, globose, of one layer, breaking into irregular fragments at maturity; volva none; mycelium inconspicuous: gleba olivaceous, odorless, attached to hyaline membranes projecting from the inner surface of the peridium at regular intervals and floating free at maturity in a hyaline, gelatinous liquid: spores very minute, ellipsoid, subhyaline under a microscope.

Protophallus jamaicensis sp. nov.

Peridium spherical, white at maturity, 4 cm. in diameter, consisting of a single layer 1 mm. thick, resembling parchment, the entire peridium breaking at the maturity of the spores into several large, irregular pieces; gleba attached to the peridium by thin, radial, hyaline, membranous plates and projecting in elongated, olivaceous, odorless masses nearly or quite to the center of the sporophore, the remaining space being filled at maturity with a homogeneous, hyaline, semigelatinous, odorless liquid; spores very copious, oblong-ellipsoid, smooth, subhyaline under a microscope, $3.5 \times 1.5 \mu$.

Type collected January 7, 1909, on shaded soil rich in humus on the bank of the Clyde River near Cinchona, Jamaica, at an elevation of 1,600 meters, *W. A. Murrill 567*.

When first observed, this species was thought to be the "egg" of a *Phallus*, but, on making a section, it was found to be quite mature and utterly devoid of a stipe or other elongating tissue. At the first incision, the hyaline liquid exuded, soon followed by lobes of the olivaceous, sporogenous tissue, which floated free like the gills of a fish or the mantle of an oyster. The liquid resembled the white of an egg, but poured out in large drops like semi-fluid jelly. It was probably the result of deliquescence. The membranous plates to which the spore-masses were attached were as regular in arrangement as the partitions of an orange, but they did not extend to the center. Miss Taylor, who was study-

ing at Cinchona at the time, placed a section of the gleba under her microscope and made a pencil sketch of it for me. She found the sterile threads to be hyaline, septate, interwoven, and slightly larger than the spores.

The remains of another specimen were found near the first, and these served to indicate the method of spore dissemination, which is evidently by means of rain. There is no odor about the plant to attract insects and no stipe to lift the gleba in air; when the spores are mature, the interior tension evidently ruptures the weakened peridium and allows the liquid containing the countless minute spores to escape, when the frequent rains effect their wide distribution.

The generic name assigned refers to the resemblance of this species to the "egg," or undeveloped stage, of a species of *Phallus*. The affinities of the genus appear to be with *Phallogaster*.

Since the above was written, Miss Taylor has brought in three specimens collected by her on the same spot as the types. They all show a single mycelial cord attaching the fruit-body to the underground mycelium. In the young stages the peridium appears to be avellaneous becoming white at maturity.